IN THE CLAIMS

Please cancel claims 1-21 and 23-47 without prejudice.

Please add new claims 48-64 as follows:

48. A common data model representing a circuit that will be fabricated on an integrated circuit chip comprising:

a data representation including a plurality of objects that together represent the circuit, certain ones of the objects including a netlist portion that represents a corresponding portion of the circuit, and each of the objects:

being logically correlated to at least one other object so that all of the objects describe the circuit; and

each of the objects, once associated with a physical location, is adapted for subsequent retrieval ~~can subsequently be retrieved~~ using an area query corresponding to the physical location.

49. The model according to claim 48 wherein the physical location association of objects is implemented using hierarchical partitioning.

50. The model according to claim 49 wherein the hierarchical partitioning is implemented using a tree.

51. The model according to claim 50 wherein the circuit is represented within an area, with a plurality of cutlines that partition the area into a plurality of rectangles.

52. The model according to claim 51 wherein the tree contains a plurality of leaf nodes, and each of the leaf nodes corresponds to one of the cutlines.

53. The model according to claim 52 wherein the tree includes a linked list that identifies each cell that lies on a particular one of the cutlines.

54. The model according to claim 52 wherein the tree contains a plurality of non-leaf nodes, each of the non-leaf nodes associated with one of the leaf nodes, and each of the non-leaf nodes containing at least two child nodes, each child node corresponding to an area on an opposite side of the cutline associated with the one leaf node.

55. The model according to claim 50 wherein certain of the objects represent cells.

56. The model according to claim 50 wherein certain of the objects represent a net or a part of a net.

57. The model according to claim 50 wherein certain of the objects represent pins.

58. The model according to claim 48 wherein the each of the objects corresponding to each of the physical locations is maintained in an active memory ~~that can be operated upon~~.